USSN: 10/716,846

LISTING OF THE CLAIMS

(currently amended) A method of treating Celiac Sprue, the method comprising:
 orally administering to a patient an effective dose of <u>0.01 mg to 500 mg/kg body weight per day of</u> a tissue transglutaminase (tTGase) inhibitor wherein said tTGase inhibitor has the formula:

$$R_1$$
 R_2
 R_2
 R_3
 R_3

wherein R₁ is selected from arylether, aryl, alkylether or alkyl group;

 R_2 is selected from the group consisting of (S)-Bn, (S)-CO₂Me, (S)-Me, (R)-Bn, (S)-CH₂CONHBn, (S)-(1*H*-indol-yl)-methyl, and (S)-(4-hydroxy-phenyl)-methyl;

R₃ is selected from F, I, Cl, and Br;

n is from 0 to 3; and X is selected from the group consisting of O and NH, wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

- 2. (canceled)
- 3. (original) The method of Claim 1, wherein said tTGase inhibitor is administered with a glutenase.
 - 4. (canceled)
- 5. (original) The method according to Claim 1, wherein said tTGase inhibitor is contained in a formulation that comprises an enteric coating.
 - 6-10 (canceled)
- 11. (currently amended) A method of treating Celiac Sprue, the method comprising: orally administering to a patient an effective dose of <u>0.01 mg to 500 mg/kg body weight per day of a tissue transglutaminase (tTGase)</u> tTGase inhibitor, wherein said tTGase inhibitor has the formula:

$$R_1 \xrightarrow{N} \underset{H}{\overset{R_2}{\overset{O}{\overset{O}{\overset{}}{\underset{O-N}{\overset{}}{\underset{O}$$

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wherein R₁ and R₂ are independently selected from H, alkyl, alkenyl, cycloalkyl, aryl, heteroalkyl, heteroaryl, alkoxy, alkylthio, arakyl, aralkenyl, halo, haloalkyl, haloalkoxy, heterocyclyl, and heterocyclylalkyl groups, an amino acid, a peptide, a peptidomimetic, or a peptidic protecting group; wherein R₂ can additionally be selected from the group consisting of (SEQ ID NO:1) LPYPQPQLPY, (SEQ ID NO:2) LPFPQPQLPF-NH₂, (SEQ ID NO:3) LPYPQPQLP, (SEQ ID NO:4) LPYPQPQLPYPQPQPF, LP-X₂₋₁₅, where X₂₋₁₅ is a peptide consisting of any 2-15 amino acid residues followed by a C-terminal proline; R₃ is selected from F, I, Cl, and Br; n is from 0 to 10; and X is selected from the group consisting of O and NH, wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

12. (previously presented) The method of Claim 11, wherein R_1 is selected from the group consisting of BnO, Me, Cbz, Fmoc, Boc, PQP, Ac-PQP, (SEQ ID NO:5) PQPQLPYPQP, (SEQ ID NO:6) Ac-PQPQLPFPQP, (SEQ ID NO:7) QLQPFPQP, (SEQ ID NO:8) LQLQPFPQPLPYPQP, X_{2-15} -P, where X_{2-15} is a peptide consisting of any 2-15 amino acid residues followed by a N-terminal proline.

13. (original) The method of Claim 11, wherein R_2 is selected from the group consisting of (S)-Bn, (S)-CO₂Me, (S)-Me, (R)-Bn, (S)-CH₂CONHBn, (S)-(1*H*-inol-yl)-methyl, (S)-(4-hydrohyphenyl)-methyl, OMe, OtBu, Gly, Gly-NH₂, LPY, LPF-NH₂.

14. (original) The method according to Claim 11, wherein said tTGase inhibitor is selected from the group consisting of:

{(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-phenyl-ethyl}-carbamic acid benzyl ester; (S)-2-Benzyloxycarbonylamino-4-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-butyric acid methyl ester; (S)-2-Benzyloxycarbonylamino-*N*-(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-succinamic acid methyl ester; (S)-2-Benzyloxycarbonylamino-3-phenyl-propionic acid 3-bromo-4,5-dihydro-isoxazol-5-ylmethyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-ethyl}-carbamic acid benzyl ester; (S)-2-Acetylamino-*N*-(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamic acid benzyl ester; {(S)-2-Benzylcarbamoyl-1-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamic acid benzyl ester; {(S)-2-Benzylcarbamoyl-1-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-ethyl}-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(1*H*-indol-3-yl)-ethyl]-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-phenyl-ethyl}-carbamic

acid benzyl ester; and [(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl]-carbamic acid benzyl ester.

15 – 22 (canceled)

23. (currently amended) A method of treating Celiac Sprue, the method comprising: orally administering to a patient an effective dose of <u>0.01 mg to 500 mg/kg body weight per day of the tissue transglutaminase</u> (tTGase) tTGase inhibitor:

[(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl]-carbamic acid benzyl ester;

wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

- 24. (previously presented) The method of Claim 23, wherein said tTGase inhibitor is administered with a glutenase.
- 25. (previously presented) The method according to Claim 23, wherein said tTGase inhibitor is contained in a formulation that comprises an enteric coating.